

# LAB GUIDE

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## Lab: App Modernization

### Pre-requisites

- Microsoft Azure Account: You'll need a valid and active Azure account for the Azure labs.

### Length

30 minutes

## Exercise 1: Migrate the database to Azure SQL Database

### Task 1: Provision a SQL Server

In this task, you will create a SQL Server (logical server). You will not create the databases at this time since it will be created during the database migration step
















1. In a web browser, navigate to the Azure portal <http://portal.azure.com> and sign in with the credentials provided.
2. Select "+Create a resource", enter SQL Server into the Search the Marketplace box, press enter and select SQL Server (logical server) from the results.

Everything ✦ □ ⋮

SQL Server

Pricing: All Operating System: All Publisher: All

Results

NAME	PUBLISHER	CATEGORY
 SQL Server 2016 SP1 Enterprise on Windows Server 2016	Microsoft	Compute
 SQL server (logical server)	Microsoft	Databases
 SQL Server Module	Microsoft	Databases
 ScaleArc for SQL Server	ScaleArc	Compute
 SQL Server AlwaysOn Cluster	Microsoft	Compute
 MS SQL Server Integration Services to Alation	Information Asset	Storage
 DgSecure for SQL Server	Dataguise	Compute
 SQL Server 2016 SP2 Std w/ VulnerabilityAssessment	Cognosys Inc.	Compute
 Free SQL Server License: SQL Server 2019 Developer on Red Hat Enterprise Linux 7.4	Microsoft	Databases
 ScaleArc for SQL Server (pay-go)	ScaleArc	Compute
 SQL Server 2014 SP3 Enterprise on Windows Server 2012 R2	Microsoft	Databases
 SQL Server 2017 Ent w/ Vulnerability Assessment	Cognosys Inc.	Compute
 SQL Server 2014 SP3 Standard on Windows Server 2012 R2	Microsoft	Databases
 SQL Server 2017 Web with Vulnerability Assessment	Cognosys Inc.	Compute
 SQL Server 2016 SP1 Ent w/ VulnerabilityAssessment	Cognosys Inc.	Compute

3. Select Create on the SQL server (logical server) blade

4. On the SQL Server (logical server on...) blade, specify the following configuration:

- a. Server name: Enter a unique value, such as SQLTESTXXX Where you must change the values for XXX, (ensure the green checkmark appears).
- b. Server admin login: demouser
- c. Password: Password.1!!
- d. Resource group: Select the module-01-XXXXX resource group, Where XXXXX is the number assigned to your credentials.
- e. Location: Select the nearest location to where you are.

Home > New > Marketplace > Everything > SQL server (logical server) > SQL Server (logical server only)

SQL Server (logical server ...)

\* Server name  
sqltest777 ✓  
.database.windows.net

\* Server admin login  
Enter user name

\* Password

\* Confirm password

\* Subscription  
Pase para Azure: patrocinio

\* Resource group  
Select existing...  
Create new

\* Location  
East US

☒ Allow Azure services to access server ⓘ

Advanced Data Security ⓘ  
Start FREE Trial Not now

FREE trial period of 30 days, and then 289.5 MXN/server/month.  
[Learn more](#)

5. Select Create.

## Task 2: Configure SQL Server firewall

In this task, you will create a firewall rule to allow access to your SQL Server

1. After the SQL Server finishes provisioning, navigate to it by select Resource groups from the left-hand menu in the Azure portal, then click on module-01-XXXXX resource group from the list.

Home > Resource groups

Resource groups  
MS Azure Labs

+ Add Edit columns Refresh Assign tags Export to CSV

Subscriptions: Azure Labs G-06  
Filter by name... All locations All tags

4 items

<input type="checkbox"/>	NAME	SUBSCRIPTION	LOCATION
<input checked="" type="checkbox"/>	module-01-55401	Azure Labs G-06	West US
<input type="checkbox"/>	module-02-55401	Azure Labs G-06	West US
<input type="checkbox"/>	module-03-55401	Azure Labs G-06	West US
<input type="checkbox"/>	module-04-55401	Azure Labs G-06	West US

## 2. Select your SQL Server from the resources in the group.

The screenshot shows the Azure portal interface for the resource group 'module-01-55401'. The left sidebar contains navigation options like Overview, Activity log, Access control (IAM), Tags, Events, Settings, Quickstart, Resource costs, Deployments, Policies, Properties, Locks, Automation script, Monitoring, Insights (preview), and Alerts. The main area displays the 'Overview' tab with a list of resources. The resources listed are:


NAME	TYPE	LOCATION
MyLabModule1-vnet	Virtual network	West US
MySQLVM	Virtual machine	West US
MySQLVM_disk2_cf587af7659c44f2854b43c070461867	Disk	West US
MySQLVM_OsDisk_1_70547670138c49b08db38605a88c11df	Disk	West US
MySQLVM-ip	Public IP address	West US
mysqlvmnic	Network interface	West US
MySQLVM-nsg	Network security group	West US
sqltest888	SQL server	East US


The 'sqltest888' resource is highlighted with a red box.


## 3. On the SQL Server blade, select Firewalls and virtual networks under Settings.


The screenshot shows the Azure portal interface for the 'sqltest888' SQL server. The left sidebar contains navigation options like Diagnose and solve problems, Settings, Quick start, Failover groups, Manage Backups, Active Directory admin, SQL databases, SQL elastic pools, Deleted databases, Import/Export history, DTU quota, Properties, Locks, Automation script, Security, Advanced Data Security, Auditing, Firewalls and virtual networks, Transparent data encryption, Intelligent Performance, Automatic tuning, and Recommendations. The main area displays the 'Settings' tab with a list of settings. The 'Firewalls and virtual networks' option is highlighted with a red box.

## 4. On the Firewalls and virtual networks blade, specify a new rule named ALL, with START IP 0.0.0.0, and END IP 255.255.255.255, then select Save

 Save

 Discard

 Add client IP



Connections from the IPs specified below provides access to all the databases in sqltest777.

Allow access to Azure services


ON

OFF

Client IP address

177.228.15.240

RULE NAME	START IP	END IP
All ✓	0.0.0.0 ✓	255.255.255.255 ✓ ...



Connections from the VNET/Subnet specified below provides access to all databases in sqltest777.

Virtual networks

+ Add existing virtual network

+ Create new virtual network

RULE NAME	VIRTUAL NETW...	SUBNET	ADDRESS RAN...	ENDPOINT STA...	RESOURCE GROUP	SUBSCRIPTION	STATE
No vnet rules for this server.							

5. On the Success dialog box, select OK

##Task 3: Migrate the on-premises SQL database to Azure In this task, you are going to create the AdventureTest database and migrate it from on-premises (Lab VM) into Azure SQL Database

1. On Azure Portal, From the Left menu, go to Virtual Machines.

Microsoft Azure

Search resources, services, and docs

Create a resource

Home

Dashboard

All services

FAVORITES

All resources

Resource groups

App Services

Function Apps

SQL databases

Azure Cosmos DB

**Virtual machines**

Load balancers

Storage accounts

Virtual networks

Azure Active Directory

Monitor

Advisor

Security Center

Cost Management + Billing

Help + support

Azure services [See all \(+100\) >](#)

Virtual machines

Storage accounts

App Services

SQL databases

Azure Database for PostgreSQL

Kubernetes services

Function Apps

Azure Databricks

Cognitive Services

Make the most out of Azure

**Learn** Azure with free online courses by Microsoft

[Microsoft Learn >](#)

**Monitor** your apps and infrastructure

[Azure Monitor >](#)

**Optimize** performance, reliability, security, and costs

[Azure Advisor >](#)

**Connect** to Azure via an authenticated browser-based shell

[Cloud Shell >](#)

Recent resources [See all your recent resources >](#) [See all your resources >](#)

3. Click on MySQLVM

Home > Virtual machines

## Virtual machines

Directorio predeterminado

+ Add ⌚ Reservations ≡ Edit columns ↺ Refresh | ⬢ Assign tags ▶ Start ... More

**Subscriptions:** Pase para Azure: patrocinio

Filter by name... All resource ... All types All locations All tags No grouping

1 items

<input type="checkbox"/>	NAME	TYPE	STATUS	RESOU...	LOCAT...	MAINT...	SUBSC...
<input type="checkbox"/>	MySQLVM	Virtual ma...	Running	MyLabM...	East US	-	Pase para... ⋮

4. On the VM's Dashboard, click on Connect from the upper menu.

Home > Virtual machines > MySQLVM

## MySQLVM

Virtual machine

Search (Ctrl+/) « **Connect** ▶ Start ↺ Restart ■ Stop 📷 Capture 🗑 Delete ↺ Refresh

**Overview**

- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems

**Settings**

- Networking
- Disks
- Size
- Security
- Extensions
- Continuous delivery (Preview)

Resource group (change)  
MyLabModule1

Status  
Running

Location  
East US

Subscription (change)  
Pase para Azure: patrocinio

Subscription ID  
0ee72f24-f5c8-4671-9924-573a66389975

Tags (change)  
[Click here to add tags](#)

Computer name  
MySQLVM

Operating system  
Windows

Size  
Standard D2s v3 (2 vcpus, 8 GB memory)

Public IP address  
13.90.100.211

Virtual network/subnet  
MyLabModule1-vnet/default


DNS name  
[Configure](#)

Show data for last: 1 hour 6 hours 12 hours 1 day 7 days 30 days

5. Click on Download RDP File.

## Connect to virtual machine

MySQLVM

 To improve security, enable just-in-time access on this VM. →

RDP

SSH

To connect to your virtual machine via RDP, select an IP address, optionally change the port number, and download the RDP file.


\* IP address


Public IP address (13.90.100.211) ▼

\* Port number

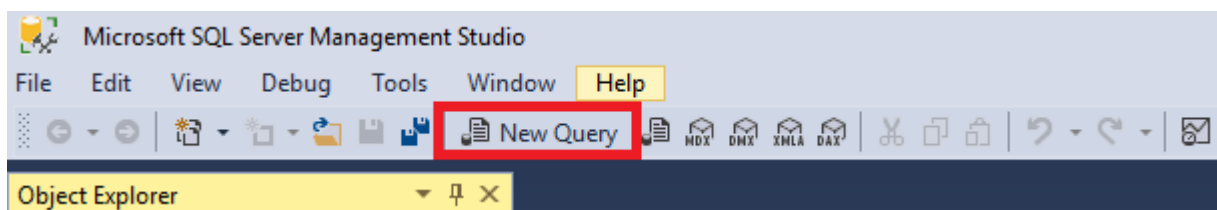
3389

Download RDP File

 Inbound traffic to the Public IP address may be blocked. You can update inbound port rules in the **VM Networking** page.

 You can troubleshoot VM connection issues by opening the **Diagnose and solve problems** page.

- Go to your downloads folder and double click on MySQLVM.rdp File, click on Connect, enter student as the user name and Pa55w.rd1234 as Password, and click on Accept. Then click on Yes.
- Click on Start Button and type Management, from the results click on SQL Management Studio 17, and then click connect.
- Click on New Query



- Type the following code and click on Execute

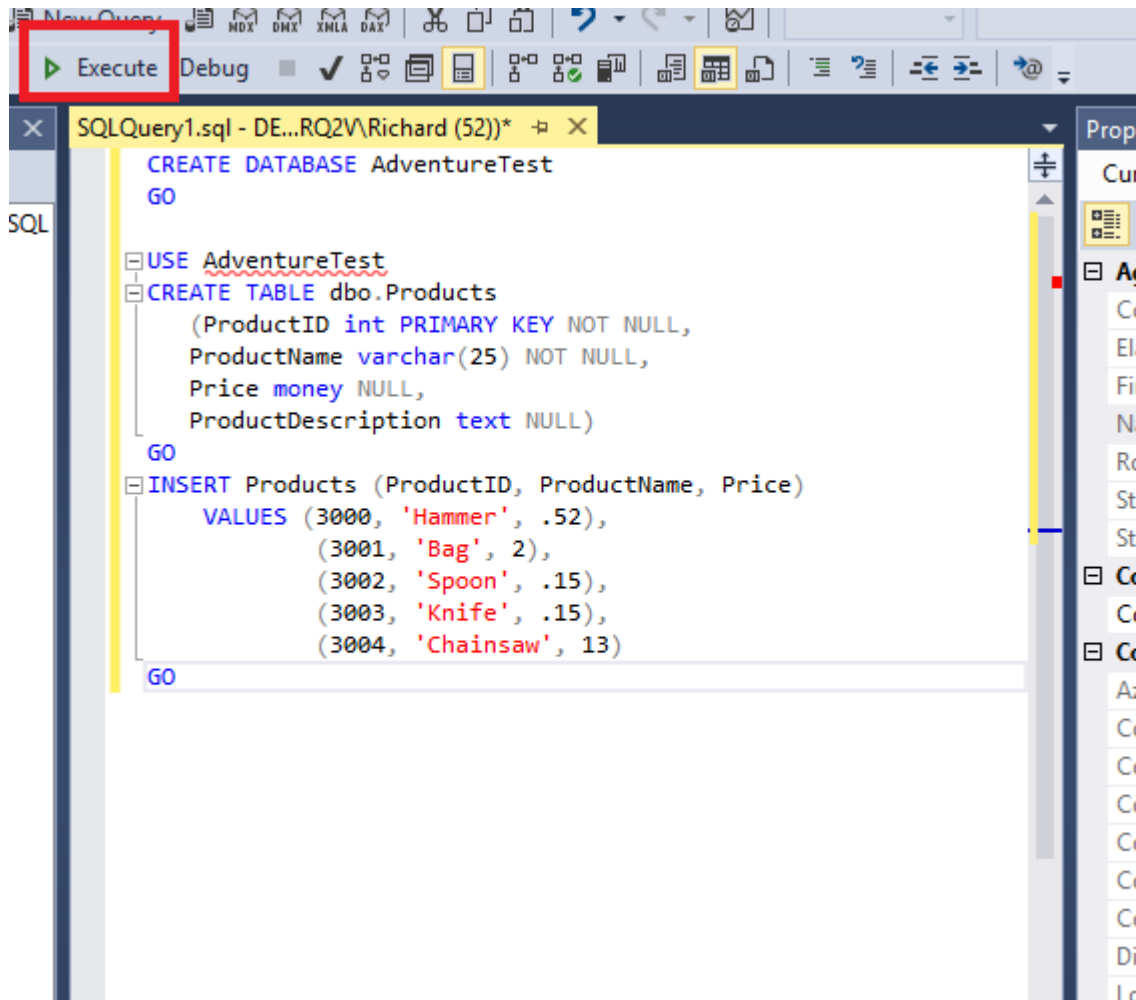
```
CREATE DATABASE AdventureTest
GO

USE AdventureTest
CREATE TABLE dbo.Products
(
    ProductID int PRIMARY KEY NOT NULL,
    ProductName varchar(25) NOT NULL,
    Price money NULL,
    ProductDescription text NULL
)
GO
```

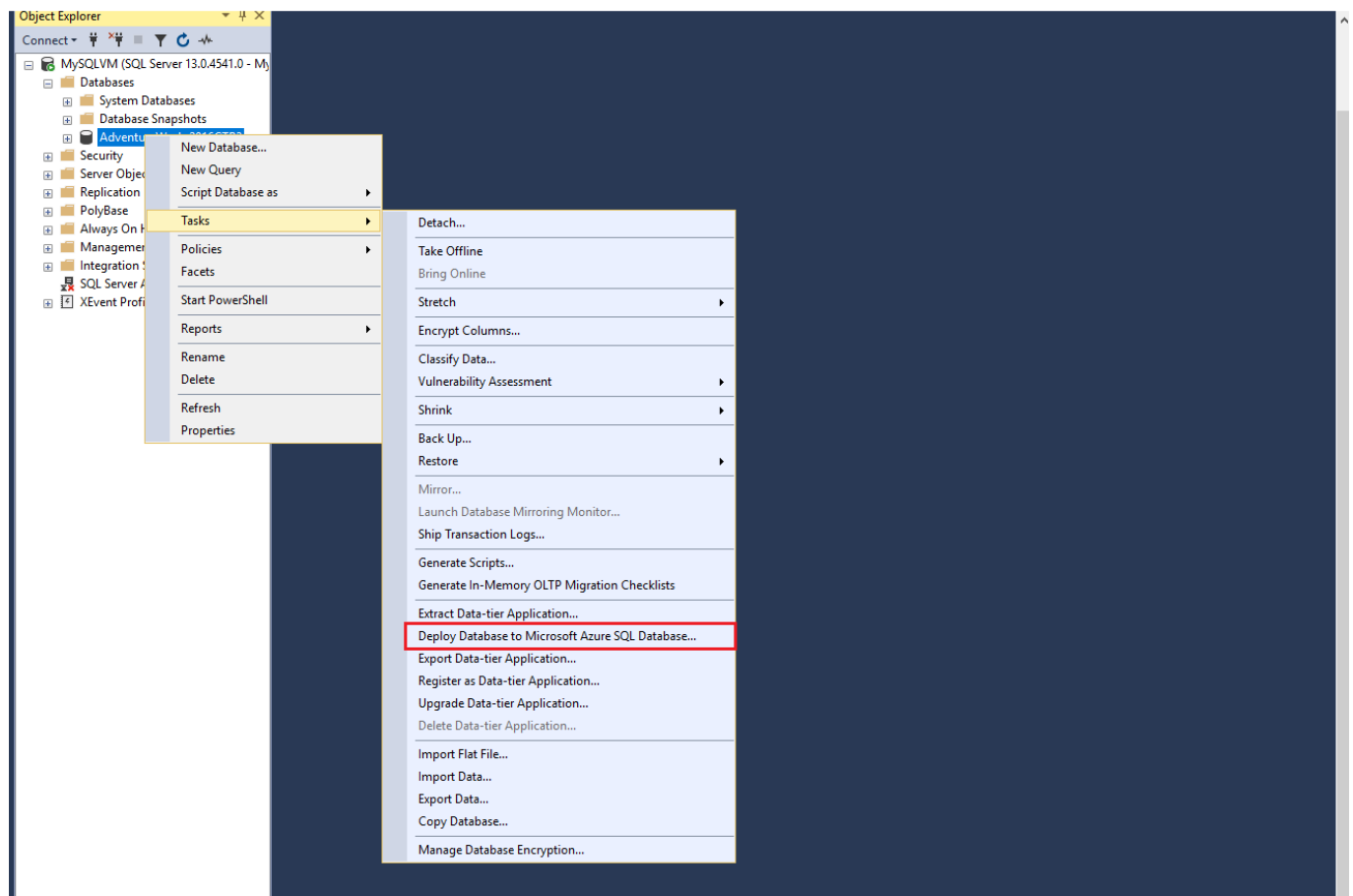


```
INSERT Products (ProductID, ProductName, Price)
VALUES (3000, 'Hammer', .52),
       (3001, 'Bag', 2),
       (3002, 'Spoon', .15),
       (3003, 'Knife', .15),
       (3004, 'Chainsaw', 13)

GO
```



10. At object explorer, expand Databases and click on refresh until the AdventureTest Database appears
11. Right-click the AdventureTest database, select Tasks and then Deploy Database to Microsoft Azure SQL Database.



12. In the Deploy Database 'AdventureTest' dialog, select Next to begin.

13. On the Deployment Settings tab, select Connect next to Server Connection.

The screenshot shows the 'Deploy Database' wizard for 'AdventureWorks2016CTP3'. The 'Deployment Settings' tab is active. The 'Specify Target Connection' section includes a 'Server connection' text box with a 'Connect...' button highlighted by a red rectangle. Below this is the 'New database name' field, which contains 'AdventureWorks2016CTP3'. The 'Microsoft Azure SQL Database settings' section has three dropdown menus: 'Edition of Microsoft Azure SQL Database', 'Maximum database size (GB)', and 'Service Objective'. The 'Other settings' section includes a 'Temporary file name' field with a file path and a 'Browse...' button. At the bottom, there are '< Previous', 'Next >', and 'Cancel' buttons.

Deploy Database 'AdventureWorks2016CTP3'

## Deployment Settings

Introduction  
Deployment Settings  
Summary  
Results

Help

### Specify Target Connection

Specify the name of the instance of SQL Server or the Microsoft Azure SQL Database server that will host the deployed database, name the new database, and then click Connect to login to the target server.

Server connection:

Connect...

New database name:

AdventureWorks2016CTP3

### Microsoft Azure SQL Database settings

Edition of Microsoft Azure SQL Database:

Maximum database size (GB):

Service Objective:

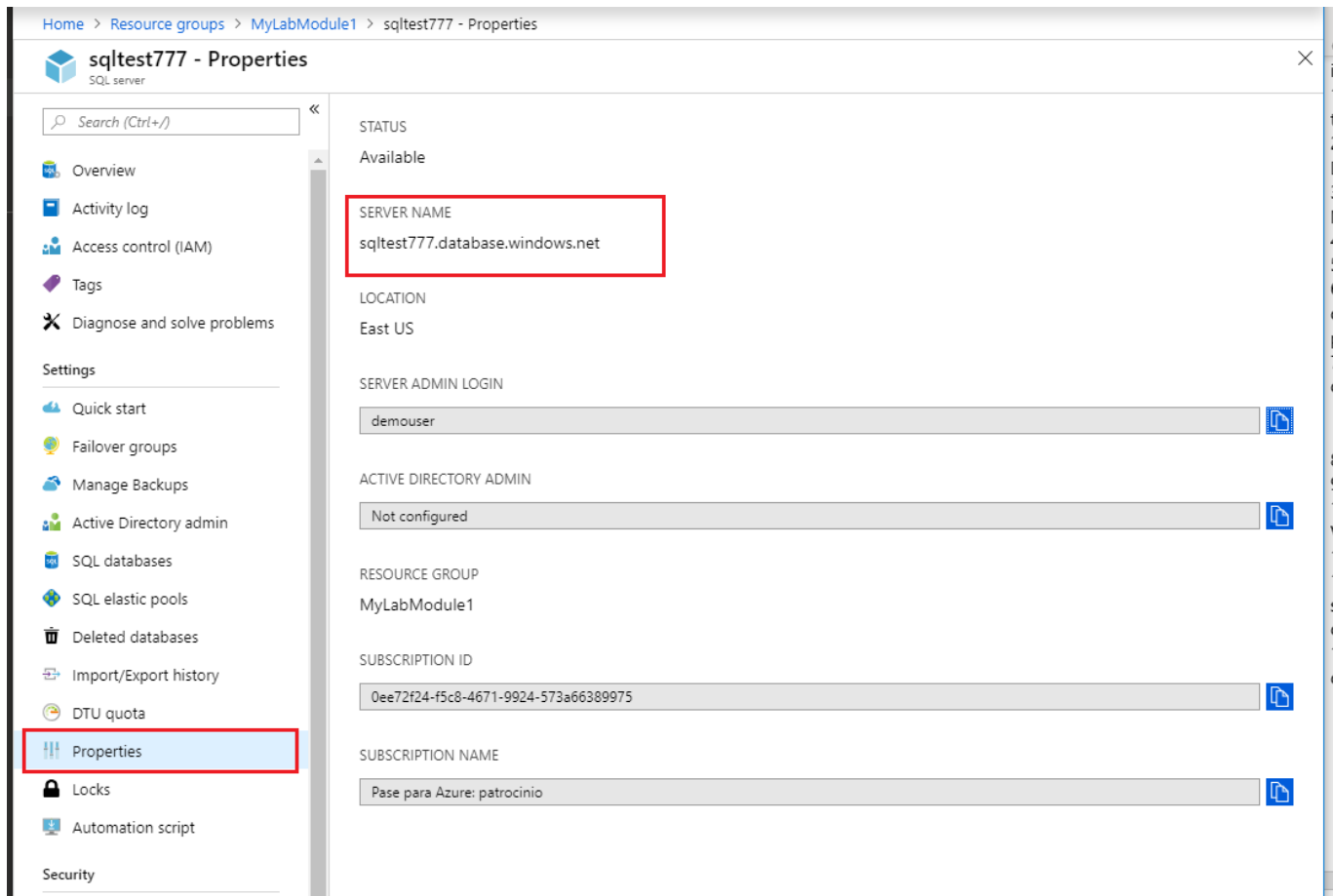
### Other settings

Temporary file name:

C:\Users\student\AppData\Local\Temp\2\AdventureWorks2016CTP3-20190214185926.ba Browse...

< Previous Next > Cancel

14. In the Connect to Server dialog, enter the server name of the Azure SQL server you created previously. You can find this by navigating to your SQL Server in the Azure portal and selecting Properties.

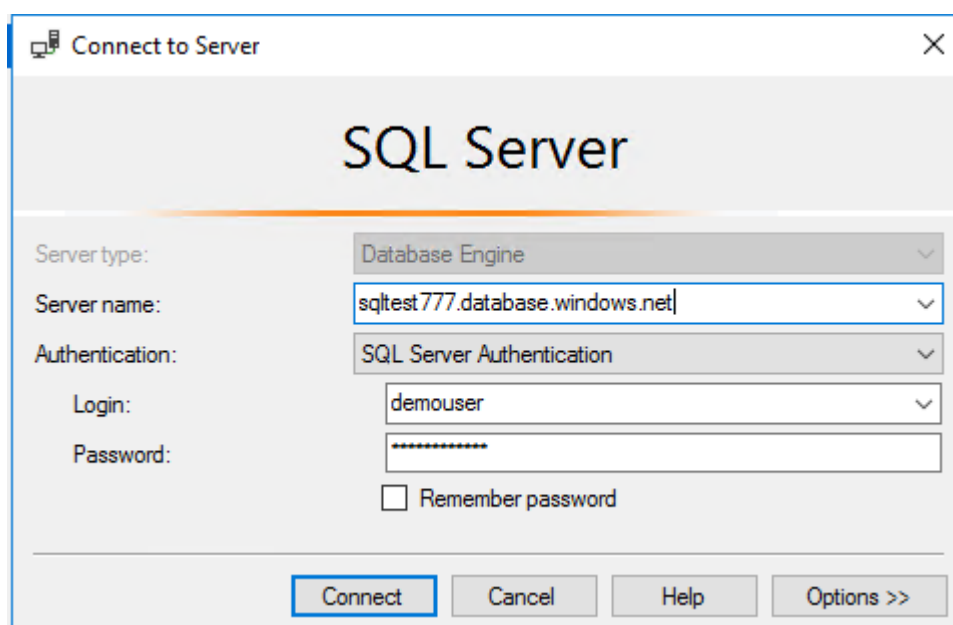


15. Next, set Authentication to SQL Server Authentication and enter the following credentials:

- a. Login: demouser
- b. Password: Password.1!!

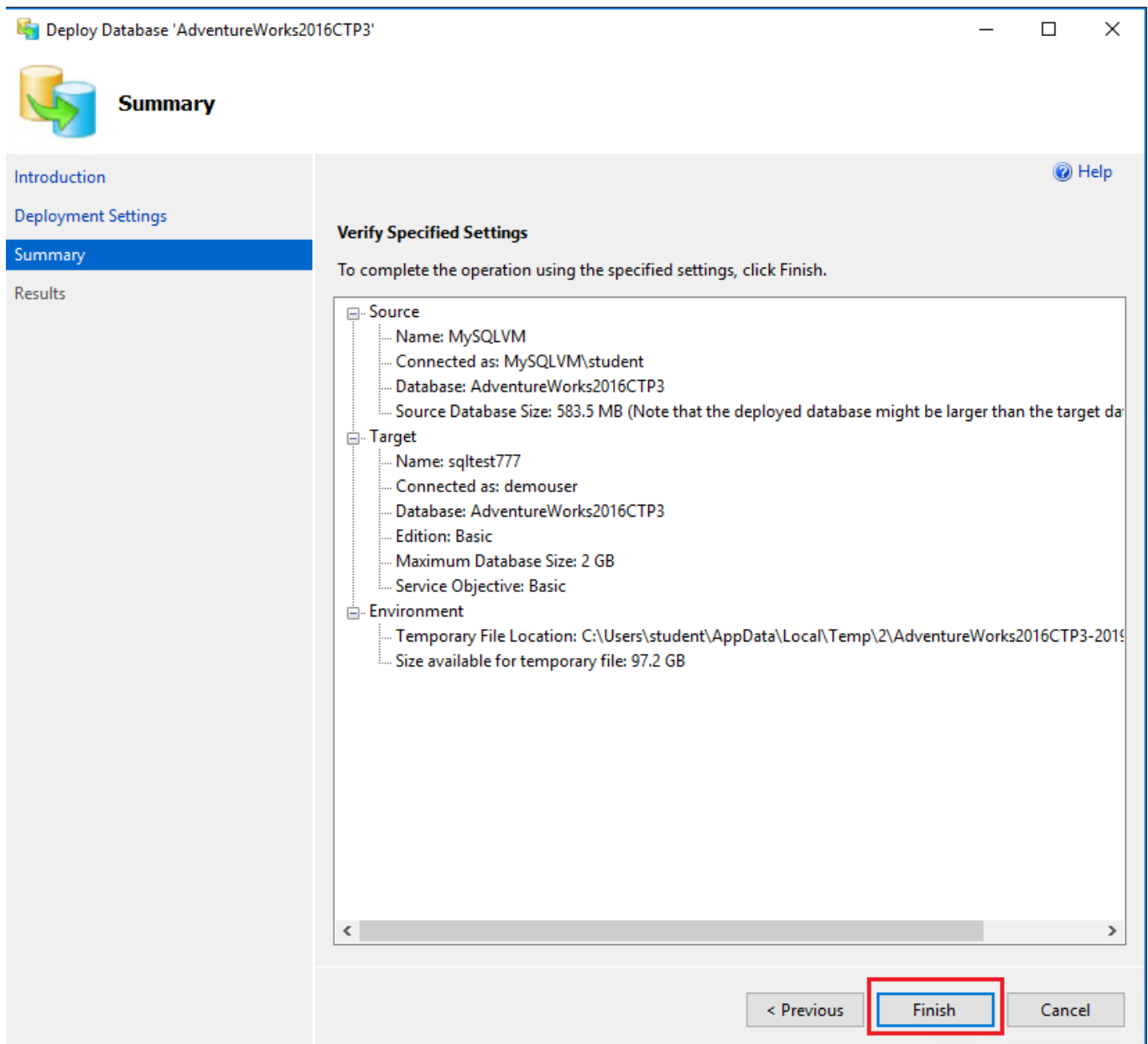
16. Check Remember password.

17. Select Connect.



18. You should now see the Azure SQL server name in the Server connection box. Verify the new database name is AdventureTest, then, select Next.

19. Verify the settings are correct and select Finish.



20. When the operation has completed, close the database deployment dialog. You should see green checkmarks next to each completed step, along with a large checkmark next to Operation Complete.

21. You can verify that the database is operational, and its tables populated by connecting to it through SSMS (SQL Server Management Studio), using the same credentials used in Step 15 above.

## Exercise 2: Provision App Services

### Task 1: Create a Web App

In this task, you will provision a Web App and API App in Azure.

1. In the Azure portal <http://portal.azure.com>, create a new Web App by selecting +Create a resource, type "web app" in the Marketplace search box, hit enter, and select the Web App item in the results.








Home > New > Marketplace > Everything

## Everything

web app

Pricing: All Operating System: All Publisher: All

Results

NAME	PUBLISHER	CATEGORY
 Web App	Microsoft	
 Web App Bot	Microsoft	
 Web App + SQL	Microsoft	Web
 HTML5 Empty Web App	Microsoft	Web
 ASP.NET Empty Web App	Microsoft	Web
 Express Web App	Microsoft	Web
 Web App + PostgreSQL	Microsoft	Web

2. Select Create on the Web App blade.

3. On the Web App Create blade, specify the following configuration:

- a. App name: Enter a unique and valid URL, such as myfirstappXXX Where you must change the values for XXX (until the green check mark appears) in the App Name field.
- b. Subscription: Select the subscription you are using for this lab.
- c. Resource group: Select Use existing and select the resource group provided for this Module 1 lab.

Microsoft Azure Search resources, services, and docs

Home > New > Marketplace > Everything > Web App > Web App

### Web App

Create

\* App name  
myfirstapp777 ✓  
.azurewebsites.net

\* Subscription  
Pase para Azure: patrocinio

\* Resource Group ⓘ  
☐ Create new ☒ Use existing  
MyLabModule1

\* OS  
 Windows  Linux

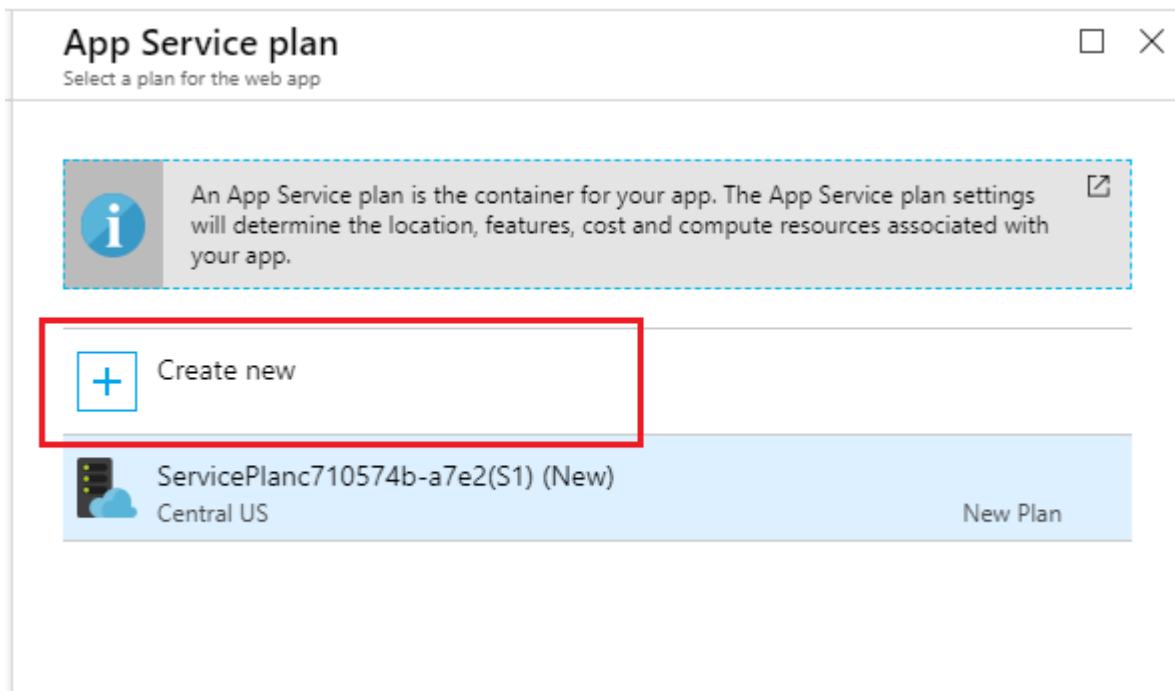
\* Publish  
 Code  Docker Image

\* App Service plan/Location  
ServicePlan710574b-a7e2(Centr... >

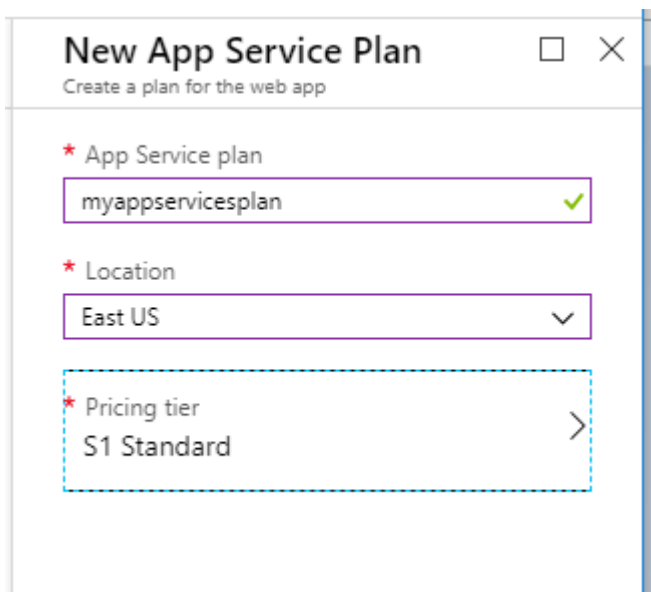
Application Insights  
Disabled >

Create Automation options

- d. Select App Service plan/Location.
- e. On the App Service plan blade, select Create new.




- f. On the New App Service Plan blade, enter the following:
- App Service plan: Enter a unique name.





- Location: Select the location you are using for this hands-on lab.
- Pricing tier: Select S1 Standard.



Home > New > Marketplace > Everything > Web App > Web App > App Service plan > New App Service Plan >

**Dev / Test**  
For less demanding workloads

**Production**  
For most production workloads

**Isolated**  
Advanced networking and scale

### Recommended pricing tiers

<b>S1</b> 100 total ACU 1.75 GB memory A-Series compute equivalent 1435.92 MXN/Month (Estimated)	<b>P1V2</b> 210 total ACU 3.5 GB memory Dv2-Series compute equivalent 2871.84 MXN/Month (Estimated)
<b>P2V2</b> 420 total ACU 7 GB memory Dv2-Series compute equivalent 5743.68 MXN/Month (Estimated)	<b>P3V2</b> 840 total ACU 14 GB memory Dv2-Series compute equivalent 11487.36 MXN/Month (Estimated)

[See additional options](#)

#### Included features

Every app hosted on this App Service plan will have access to these features:

#### Included hardware

Every instance of your App Service plan will include the following hardware configuration:

4. Select OK.
5. Select Create to provision the new Web App.

## Task 2: Provision an API App

1. In the Azure portal <http://portal.azure.com>, select +Create a resource, enter "api app" in the Marketplace Search box, hit enter, and select API App from the results.









Home > New > Marketplace > Everything

## Everything

api app

Pricing: All Operating System: All Publisher: All

Results

NAME	PUBLISHER	CATEGORY
 API App	Microsoft	Web
 Fusio open source API	tunnelbiz.com	Compute
 Web App	Microsoft	
 Web App Bot	Microsoft	
 Appcelerator Arrow API Builder	Appcelerator	Compute
 Unraveldata APM	Unravel Data	Compute
 Bing Maps API for Enterprise	Bing Maps	Developer Tools
 Web App + SQL	Microsoft	Web

2. Select Create on the API App blade.

3. On the API App Create blade, enter the following:

- a. App name: Enter a unique name, such as mynewapiXXX. Where you must change the values for XXX, (ensure the green checkmark appears).
- b. Subscription: Select the subscription you are using for this hands-on lab.
- c. Resource group: Choose Use existing and select the resource group provided for this Module 1 lab.
- d. App Service plan/Location: Select the plan you created for the Web App.

The screenshot shows the Azure portal interface for creating a new API App. The left-hand navigation pane includes options like 'Create a resource', 'Home', 'Dashboard', 'All services', and a 'FAVORITES' section. The main area displays the 'API App' creation wizard with the following fields:

- App name:** mynewapi777 (with a green checkmark and .azurewebsites.net domain)
- Subscription:** Pase para Azure: patrocinio
- Resource Group:** MyLabModule1 (selected under 'Use existing')
- App Service plan/Location:** myappservicesplan(East US)
- Application Insights:** mynewapi777

4. Select Create.

## Exercise 3: Connect your App with the Azure SQL Database

### Task 1: Get the connection String

1. On the azure portal, from the left menu, click on SQL databases
2. Select the AdventureTest Database you just migrated.
3. From the AventureTest blade, click on Connection strings

Home > [SQL databases](#) > AdventureTest (sqltest777/AdventureTest)

## AdventureTest (sqltest777/AdventureTest)

SQL database

Search (Ctrl+[/](#))

Copy Restore Export Set server firewall Delete

Resource group ([change](#)) [module1](#) Server name [sqltest777.database.windows](#)

Status Online Elastic pool [No elastic pool](#)

Location East US Connection strings [Show database connection](#)

Subscription ([change](#)) [Pase para Azure: patrocinio](#) Pricing tier [Basic](#)

Subscription ID ff568b9a-9356-43fa-ac3b-4d7e17379ef8 Oldest restore point 2019-03-07 01:10 UTC

Tags ([change](#)) [Click here to add tags](#)

### Resource utilization (AdventureTest)

1 hour 24 hours 7 days View: Max

100% 90% 80% 70% 60% 50% 40% 30% 20% 10%

4. Select the ADO.NET connections string and click on the copy button, note that you will need to change the information with your username and password

### AdventureTest (sqltest777/AdventureTest) - Connection strings

ADO.NET JDBC ODBC PHP

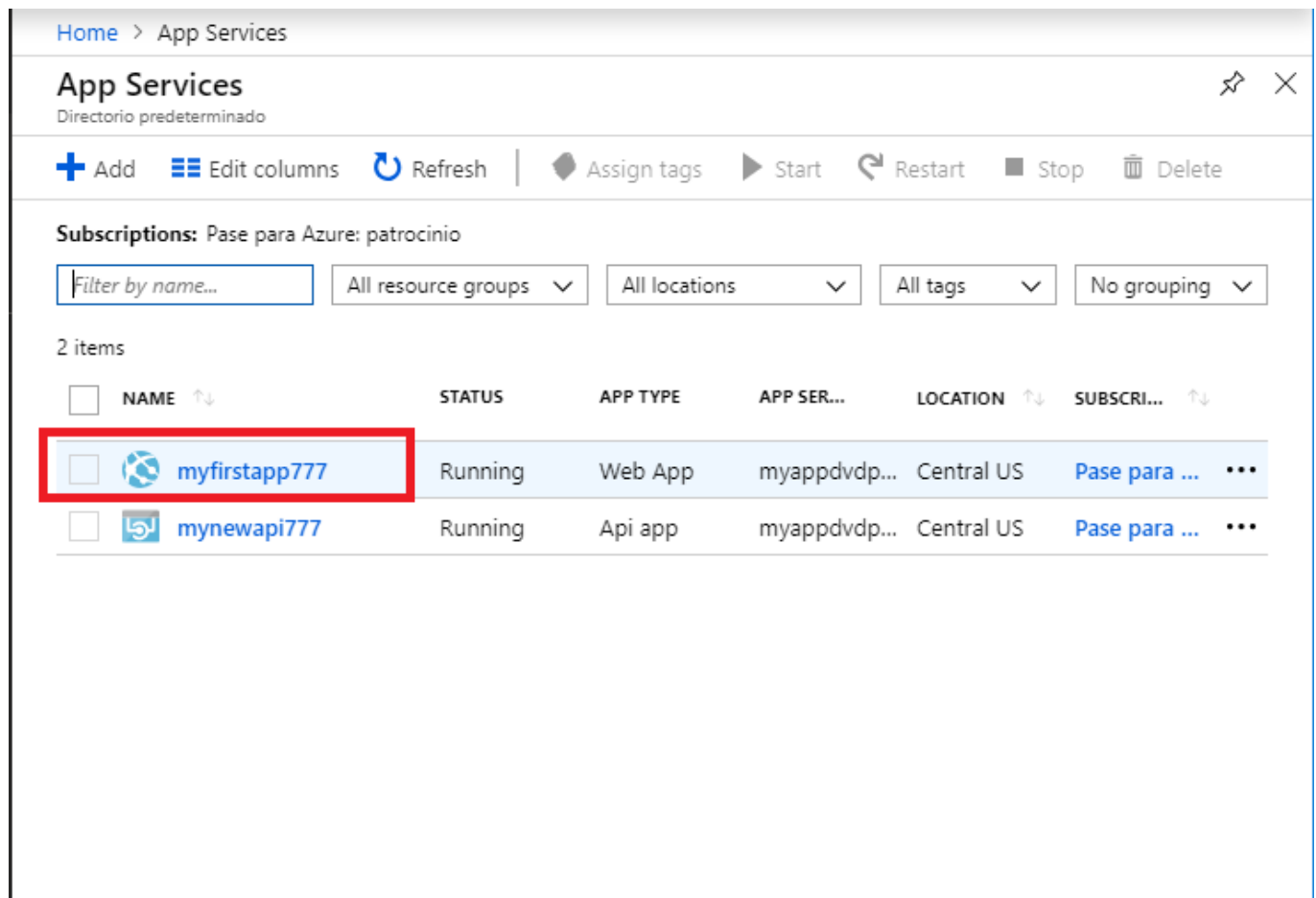
ADO.NET (SQL authentication)

Server=tcp:sqltest777.database.windows.net,1433;Initial Catalog=AdventureTest;Persist Security Info=False;User ID=(your\_username);Password=(your\_password);MultipleActiveResultSets=False;Encrypt=True;TrustServerCertificate=False;Connection Timeout=30;

[Download ADO.NET driver for SQL server](#)

## Task 2: Add the connection string to your Web App

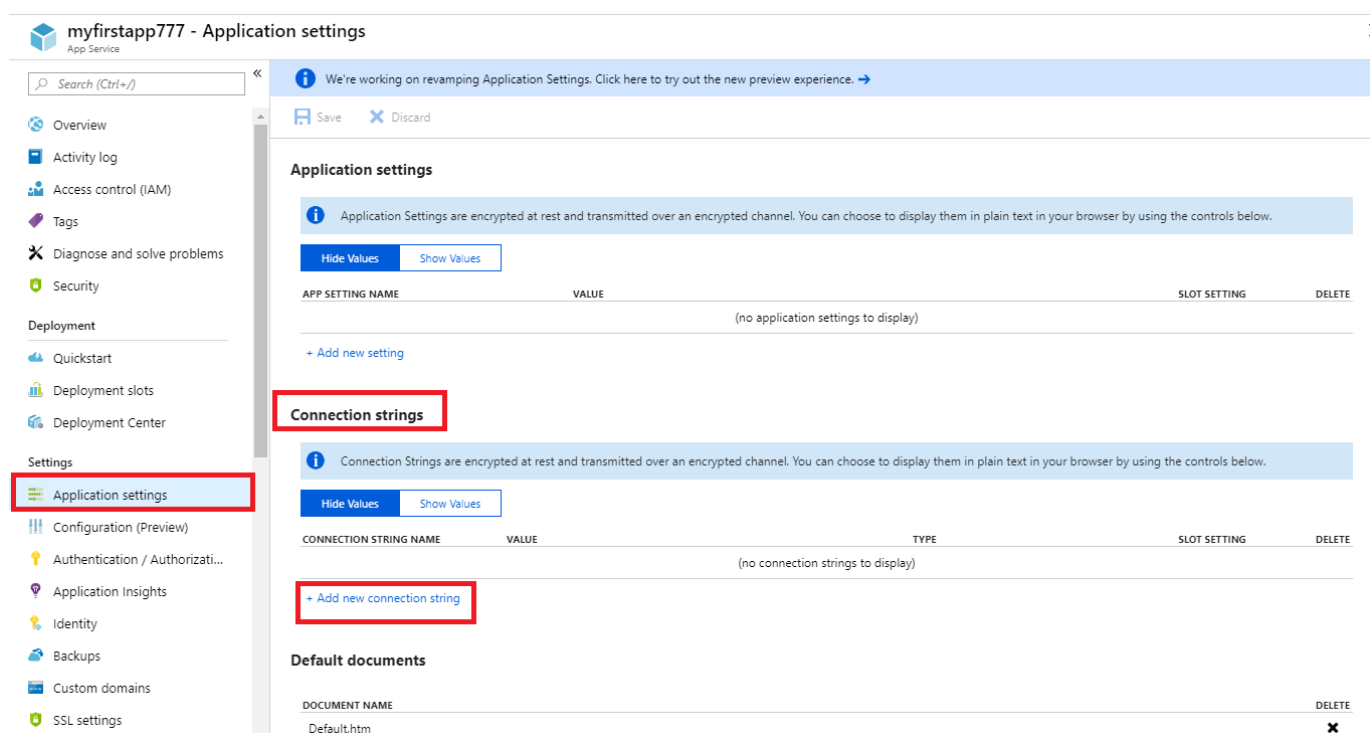
1.- On the Azure Portal from the left menu, click on App Services, and then click on the App you just created on Exercise 2



The screenshot shows the Azure App Services blade. The breadcrumb is 'Home > App Services'. The title is 'App Services' with a subtitle 'Directorio predeterminado'. Below the title are buttons: '+ Add', 'Edit columns', 'Refresh', 'Assign tags', 'Start', 'Restart', 'Stop', and 'Delete'. The 'Subscriptions' section shows 'Pase para Azure: patrocinio'. There are filters: 'Filter by name...', 'All resource groups', 'All locations', 'All tags', and 'No grouping'. It says '2 items'. The table below has columns: NAME, STATUS, APP TYPE, APP SER..., LOCATION, and SUBSCRI... The first row, 'myfirstapp777', is highlighted with a red box. The second row is 'mynewapi777'.

NAME	STATUS	APP TYPE	APP SER...	LOCATION	SUBSCRI...
myfirstapp777	Running	Web App	myappdvdp...	Central US	Pase para ...
mynewapi777	Running	Api app	myappdvdp...	Central US	Pase para ...

2.- On the Web App blade, under settings click on Application Settings, scroll down to find the connections strings section and click on +Add new connection string



The screenshot shows the 'myfirstapp777 - Application settings' blade. The left sidebar has a search bar and a list of settings: Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Security, Deployment, Quickstart, Deployment slots, Deployment Center, Settings, Application settings (highlighted with a red box), Configuration (Preview), Authentication / Authorizati..., Application Insights, Identity, Backups, Custom domains, and SSL settings. The main area has a blue banner with a message about revamping Application Settings. Below it are 'Save' and 'Discard' buttons. The 'Application settings' section has a message about encryption and 'Hide Values'/'Show Values' buttons. It shows a table with columns 'APP SETTING NAME', 'VALUE', 'SLOT SETTING', and 'DELETE', with the message '(no application settings to display)'. Below this is a '+ Add new setting' button. The 'Connection strings' section has a similar message and buttons. It shows a table with columns 'CONNECTION STRING NAME', 'VALUE', 'TYPE', 'SLOT SETTING', and 'DELETE', with the message '(no connection strings to display)'. Below this is a '+ Add new connection string' button (highlighted with a red box). The 'Default documents' section shows a table with columns 'DOCUMENT NAME' and 'DELETE', with the entry 'Default.htm'.

3.- On Connection String Name Type democs, on Value paste the connection string that you obtained on the past task, change the values from username and password with demouser and Password.1!!, Ensure that SQLAzure is selected on Type dropdown text, then click on Save at the top of the workspace

We're working on revamping Application Settings. Click here to try out the new preview experience. →

**Save** **Discard**

**Hide Values** **Show Values**

APP SETTING NAME	VALUE	SLOT SETTING	DELETE
(no application settings to display)			

+ Add new setting

### Connection strings

Connection Strings are encrypted at rest and transmitted over an encrypted channel. You can choose to display them in plain text in your browser by using the controls below.

**Hide Values** **Show Values**

CONNECTION STRING NAME	VALUE	TYPE	SLOT SETTING	DELETE
democs	D=demouser;Password=Password.1!!;MultipleActiveResultSets=False;Encrypt=True;TrustServerCertificate=False;ApplicationIntent=ReadWrite;ServerIntegrity=SSLSign;Encrypt=False;ServerName=.	SQLAzure	<input type="checkbox"/>	<b>X</b>

+ Add new connection string

4.- NOTE: You can name the connection strings to match with the connection strings you use on your code.

## Exercise 4: Identity and security

### Task 1: Protect your WebApp with Azure Identity.

1. In the Azure portal, navigate to the Web App you created on the Exercise 3 (Select, App Services in the left menu, and then your app). Under settings, select Authentication / Authorization

myfirstapp777  
App Service

Search (Ctrl+J)

Overview

- Activity log
- Access control (IAM)
- Tags
- Security (Preview)
- Diagnose and solve problems

Deployment

- Quickstart
- Deployment credentials
- Deployment slots
- Deployment Center

Settings

- Application settings
- Configuration (Preview)
- Authentication / Authorization**
- Application Insights

**Deploy to your new site** →

Resource group (change)	Status	Location	Subscription (change)	Subscription ID	Tags (change)
MyLabModule1	Running	East US	Pase para Azure: patrocinio	0ee72f24-f5c8-4671-9924-573a66389975	Click here to add tags

URL : <https://myfirstapp777.azurewebsites.net/>

App Service Plan : [myappservicesplan \(Standard\)](#)

FTP/deployment user name : No FTP/deployment user set

FTP hostname : <ftp://waws-prod-blu-065.ftps.azure.com/>

FTPS hostname : <ftps://waws-prod-blu-065.ftps.azure.com/>

**Diagnose and solve problems**  
Our self-service diagnostic and troubleshooting experience helps you identify and resolve issues with your web app.

**Application Insights**  
Application Insights helps you detect and diagnose quality issues in your apps, and helps you understand what your users actually do with it.

**App Service Advisor**  
App Service Advisor provides insights for app experience on the App Service platform. Recommendations are sorted by freshness and impact to your app.

**Http 5xx**

100  
90  
80  
70  
60



**Data In**

400B  
350B  
300B


**Data Out**

2.5kB  
2kB

2. If Authentication / Authorization is not enabled, select On.

 Save  Discard






### Authentication / Authorization

 Anonymous access is enabled on the App Service app. Users will not be prompted for login.

**App Service Authentication**

Action to take when request is not authenticated

### Authentication Providers

 Azure Active Directory	Not Configured
 Facebook	Not Configured
 Google	Not Configured
 Twitter	Not Configured
 Microsoft	Not Configured

### Advanced Settings

Token Store

**ALLOWED EXTERNAL REDIRECT URLS**


3. Under Action to take when request is not authenticated, select Log in with Azure Active Directory.
4. Under Authentication Providers, Select Azure Active Directory, and then select Express under Management Mode.


Home > App Services > myfirstapp777 - Authentication / Authorization > Azure Active Directory

## Azure Active Directory Settings

### Active Directory Authentication

These settings allow users to sign in with Azure Active Directory. Click here to learn more. [Learn more](#)

Management mode  Off **Express** Advanced

 Express mode allows user to create an AD Application or select an existing AD application in your current Active Directory.

Current Active Directory  
Directorio predeterminado

Management mode Create New AD App Select Existing AD App

\* Create App  
myfirstapp777

Grant Common Data Services Permissions On **Off**

5. Select OK to register the App Service app in Azure Active Directory. This creates a new app registration.
6. Click Save.

You are now ready to use Azure Active Directory for authentication in your App Service app.

### Task 2: Test the protection.

1. From the App Services Blade, click on Overview.
2. Under URL on the dashboard click on the link to test the Authentication you just Enabled.
3. Sign in with the azure account provided for this lab

Note that the web app you just created now is protected with Azure Active Directory Identity

End of the lab